CLAIMS

1. A multilayered substrate for a semiconductor device, which has a multilayered substrate body formed of a plurality sets of a conductor layer and an insulation layer, and having a face for mounting a semiconductor element thereon and another face for external connection terminals, the face for mounting a semiconductor device being provided with pads through which the substrate is connected to a semiconductor element to be mounted thereon, and the face for external connection terminals being provided with pads through which the substrate is connected to an external electrical circuit, wherein a reinforcing sheet is respectively joined to the face for mounting a semiconductor element thereon and the face for external connection terminals of the multilayered substrate body.

2. The multilayered substrate for a semiconductor device of claim 1, wherein the reinforcing sheet joined to the face for external connection terminals has through holes corresponding to the respective pads for the external connection terminals.

3. The multilayered substrate for a semiconductor device of claim 2, wherein the reinforcing sheet is made of a metal, and the entire surface thereof, including the inner wall surfaces of the through holes, is covered with an insulation layer.

4. The multilayered substrate for a semiconductor device of claim 3, wherein the metal is aluminum, and the insulation layer covering the entire surface thereof is a layer of alumite (Al_2O_3) obtained by anodizing the aluminum surface.

5. The multilayered substrate for a semiconductor device of claim 1, wherein the reinforcing sheet joined to the face for external connection terminals is in the form of frame.

6. The multilayered substrate for a semiconductor device of claim 5, wherein the reinforcing sheet has a

reinforcing member or members crossing the inside space of the frame.

7. The multilayered substrate for a semiconductor device of claim 5, wherein the reinforcing sheet is made of a metal.

8. The multilayered substrate for a semiconductor device of claim 6, wherein the reinforcing sheet is made of a metal.

9. The multilayered substrate for a semiconductor device of claim 2, wherein the reinforcing sheet is adhered to the face for external connection terminals of the multilayered substrate body by an adhesive.

10. The multilayered substrate for a semiconductor device of claim 9, wherein the adhesive contains particles of a diameter that is able to maintain a prescribed gap between the reinforcing sheet and the face for external connection terminals of the multilayered substrate body such that the adhesive is not extruded into the through holes of the reinforcing sheet when the reinforcing sheet is joined to the face for external connection terminals of the multilayered substrate body.

11. The multilayered substrate for a semiconductor device of claim 1, wherein the reinforcing sheet joined to the face for mounting a semiconductor element thereon is in the form of a frame made of a metal.

12. The multilayered substrate for a semiconductor device of claim 11, wherein the frame is formed by etching a metal sheet on which the multilayered substrate body is formed so as to remove only the metal material in the region where a semiconductor element is to be mounted.

13. The multilayered substrate for a semiconductor device of claim 1, wherein the pads provided at the face for mounting a semiconductor device thereon are in the form of bump so that the tip of the pad protrudes from the face for mounting a semiconductor element of the multilayered substrate body.

14. The multilayered substrate for a semiconductor device of claim 2, wherein the pads provided at the face for mounting a semiconductor device thereon are in the form of bump so that the tip of the pad protrudes from the face for mounting a semiconductor element of the multilayered substrate body.

15. The multilayered substrate for a semiconductor device of claim 5, wherein the pads provided at the face for mounting a semiconductor device thereon are in the form of bump so that the tip of the pad protrudes from the face for mounting a semiconductor element of the multilayered substrate body.

16. The multilayered substrate for a semiconductor device of claim 11, wherein the pads provided at the face for mounting a semiconductor device thereon are in the form of bump so that the tip of the pad protrudes from the face for mounting a semiconductor element of the multilayered substrate body.